

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No. 1999P09028US01

First Inventor Gary Brian Merrill

Title High Temperature Erosion Resistant Coating and Material Containing
Compacted Hollow Geometric Shapes

Express Mail Label No. ER 373308334US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 30]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the invention
 - Brief Summary of the invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 6]
5. Oath or Declaration [Total Sheets 3]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 CFR 1.63 (d))
(for a continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:

Commissioner for Patents
Mail Stop Patent Application
P.O. Box 1450
Alexandria VA 22313-1450

7. ☐ CD-ROM or CD-R in duplicate, large table or
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATIONS PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Required copies of
Statement (IDS)/PTO-1449 IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: 09 / 467,237
Prior application information: Examiner Zidia T. Pittman Art Unit: 1725

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

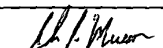
19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label

(Insert Customer No. or Attach bar code label here)

or ☒ Correspondence address below

Name	Siemens Corporation				
Address	Intellectual Property Dept.				
	170 Wood Avenue South				
City	Iselin	State	NJ	Zip Code	08830
Country	USA	Telephone	732-321-3026	Fax	732-321-3014

Name (Print/Type)	John P. Musone	Registration No. (Attorney/Agent)	44,961
Signature		Date	August 27, 2003

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

1755 U.S. PTO
10/648922
08/27/03

14230 U.S. PTO
08/27/03

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTO/SB/17 (05-03)
Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">for FY 2003</h3> <p style="font-size: small; margin: 5px 0;">Effective 01/01/2003. Patent fees are subject to annual revision.</p>		<p style="margin: 0;">Complete if Known</p>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	unknown
TOTAL AMOUNT OF PAYMENT (\$) 750		Filing Date	August 27, 2003
		First Named Inventor	Gary Brian Merrill
		Examiner Name	unknown
		Art Unit	unknown
		Attorney Docket No.	1999P09028US01

<p style="text-align: center; font-weight: bold; font-size: small;">METHOD OF PAYMENT (check all that apply)</p> <p> <input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money <input type="checkbox"/> Other <input type="checkbox"/> None Order </p> <p><input checked="" type="checkbox"/> Deposit Account:</p> <p>Deposit Account Number: 19-2179</p> <p>Deposit Account Name: SIEMENS CORPORATION</p> <p>The Director is authorized to: (check all that apply)</p> <p> <input checked="" type="checkbox"/> Charge fee(s) indicated below <input checked="" type="checkbox"/> Credit any overpayments <input checked="" type="checkbox"/> Charge any additional fee(s) during the pendency of this application <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. </p> <p style="text-align: center; font-weight: bold; font-size: small;">FEE CALCULATION</p> <p>1. BASIC FILING FEE</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>750</td> <td>2001</td> <td>375</td> <td>Utility filing fee</td> <td>750</td> </tr> <tr> <td>1002</td> <td>330</td> <td>2002</td> <td>165</td> <td>Design filing fee</td> <td></td> </tr> <tr> <td>1003</td> <td>520</td> <td>2003</td> <td>260</td> <td>Plant filing fee</td> <td></td> </tr> <tr> <td>1004</td> <td>750</td> <td>2004</td> <td>375</td> <td>Reissue filing fee</td> <td></td> </tr> <tr> <td>1005</td> <td>160</td> <td>2005</td> <td>80</td> <td>Provisional filing fee</td> <td></td> </tr> <tr> <td colspan="5" style="text-align: right;">SUBTOTAL (1)</td> <td>(\$ 750)</td> </tr> </tbody> </table> <p>2. EXTRA CLAIM FEES</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th></th> <th>Total Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>20</td> <td>-20 **</td> <td>0</td> <td>0</td> </tr> <tr> <td>Independent Claims</td> <td>3</td> <td>-3 **</td> <td>0</td> <td>0</td> </tr> <tr> <td>Multiple Dependent</td> <td></td> <td></td> <td>0</td> <td>0</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1202</td> <td>18</td> <td>2202</td> <td>9</td> <td>Claims in excess of 20</td> <td></td> </tr> <tr> <td>1201</td> <td>84</td> <td>2201</td> <td>42</td> <td>Independent claims in excess of 3</td> <td></td> </tr> <tr> <td>1203</td> <td>280</td> <td>2203</td> <td>140</td> <td>Multiple dependent claim, if not paid</td> <td></td> </tr> <tr> <td>1204</td> <td>84</td> <td>2204</td> <td>42</td> <td>** Reissue independent claims over original patent</td> <td></td> </tr> <tr> <td>1205</td> <td>18</td> <td>2205</td> <td>9</td> <td>** Reissue claims in excess of 20 and over original patent</td> <td></td> </tr> <tr> <td colspan="5" style="text-align: right;">SUBTOTAL (2)</td> <td>(\$ 0)</td> </tr> </tbody> </table>	Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1001	750	2001	375	Utility filing fee	750	1002	330	2002	165	Design filing fee		1003	520	2003	260	Plant filing fee		1004	750	2004	375	Reissue filing fee		1005	160	2005	80	Provisional filing fee		SUBTOTAL (1)					(\$ 750)		Total Claims	Extra Claims	Fee from below	Fee Paid	Total Claims	20	-20 **	0	0	Independent Claims	3	-3 **	0	0	Multiple Dependent			0	0	Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1202	18	2202	9	Claims in excess of 20		1201	84	2201	42	Independent claims in excess of 3		1203	280	2203	140	Multiple dependent claim, if not paid		1204	84	2204	42	** Reissue independent claims over original patent		1205	18	2205	9	** Reissue claims in excess of 20 and over original patent		SUBTOTAL (2)					(\$ 0)	<p style="text-align: center; font-weight: bold; font-size: small;">FEE CALCULATION (continued)</p> <p>3. ADDITIONAL FEES</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge - late provisional filing fee or cover sheet.</td> <td></td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For filing a request for reexamination</td> <td></td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805</td> <td>1,840*</td> <td>1805</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252</td> <td>410</td> <td>2252</td> <td>205</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253</td> <td>930</td> <td>2253</td> <td>465</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254</td> <td>1,450</td> <td>2254</td> <td>725</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255</td> <td>1,970</td> <td>2255</td> <td>985</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401</td> <td>320</td> <td>2401</td> <td>160</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>1402</td> <td>320</td> <td>2402</td> <td>160</td> <td>Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>1403</td> <td>280</td> <td>2403</td> <td>140</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1451</td> <td>1,510</td> <td>1451</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td>Petition to revive - unavoidable</td> <td></td> </tr> <tr> <td>1453</td> <td>1,300</td> <td>2453</td> <td>650</td> <td>Petition to revive - unintentional</td> <td></td> </tr> <tr> <td>1501</td> <td>1,300</td> <td>2501</td> <td>650</td> <td>Utility issue fee (or reissue)</td> <td></td> </tr> <tr> <td>1502</td> <td>470</td> <td>2502</td> <td>235</td> <td>Design issue fee</td> <td></td> </tr> <tr> <td>1503</td> <td>630</td> <td>2503</td> <td>315</td> <td>Plant issue fee</td> <td></td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807</td> <td>50</td> <td>1807</td> <td>50</td> <td>Processing fee under 37 CFR 1.17 (q)</td> <td></td> </tr> <tr> <td>1806</td> <td>180</td> <td>1806</td> <td>180</td> <td>Submission of Information Disclosure Stmt</td> <td></td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td></td> </tr> <tr> <td>1809</td> <td>750</td> <td>2809</td> <td>375</td> <td>Filing a submission after final rejection (37 CFR § 1.129(a))</td> <td></td> </tr> <tr> <td>1810</td> <td>750</td> <td>2810</td> <td>375</td> <td>For each additional invention to be examined (37 CFR § 1.129(b))</td> <td></td> </tr> <tr> <td>1801</td> <td>750</td> <td>2801</td> <td>375</td> <td>Request for Continued Examination (RCE)</td> <td></td> </tr> <tr> <td>1802</td> <td>900</td> <td>1802</td> <td>900</td> <td>Request for expedited examination of a design application</td> <td></td> </tr> </tbody> </table> <p>Other fee (specify):</p> <p style="text-align: right;">SUBTOTAL (3) (\$ 0)</p> <p style="font-size: x-small;">*Reduced by Basic Filing Fee Paid</p>	Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	1051	130	2051	65	Surcharge - late filing fee or oath		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For filing a request for reexamination		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		1251	110	2251	55	Extension for reply within first month		1252	410	2252	205	Extension for reply within second month		1253	930	2253	465	Extension for reply within third month		1254	1,450	2254	725	Extension for reply within fourth month		1255	1,970	2255	985	Extension for reply within fifth month		1401	320	2401	160	Notice of Appeal		1402	320	2402	160	Filing a brief in support of an appeal		1403	280	2403	140	Request for oral hearing		1451	1,510	1451	1,510	Petition to institute a public use proceeding		1452	110	2452	55	Petition to revive - unavoidable		1453	1,300	2453	650	Petition to revive - unintentional		1501	1,300	2501	650	Utility issue fee (or reissue)		1502	470	2502	235	Design issue fee		1503	630	2503	315	Plant issue fee		1460	130	1460	130	Petitions to the Commissioner		1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)		1806	180	1806	180	Submission of Information Disclosure Stmt		8021	40	8021	40	Recording each patent assignment per property (times number of properties)		1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))		1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))		1801	750	2801	375	Request for Continued Examination (RCE)		1802	900	1802	900	Request for expedited examination of a design application	
Large Entity		Small Entity		Fee Description			Fee Paid																																																																																																																																																																																																																																																																																												
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																																																																																																																
1001	750	2001	375	Utility filing fee	750																																																																																																																																																																																																																																																																																														
1002	330	2002	165	Design filing fee																																																																																																																																																																																																																																																																																															
1003	520	2003	260	Plant filing fee																																																																																																																																																																																																																																																																																															
1004	750	2004	375	Reissue filing fee																																																																																																																																																																																																																																																																																															
1005	160	2005	80	Provisional filing fee																																																																																																																																																																																																																																																																																															
SUBTOTAL (1)					(\$ 750)																																																																																																																																																																																																																																																																																														
	Total Claims	Extra Claims	Fee from below	Fee Paid																																																																																																																																																																																																																																																																																															
Total Claims	20	-20 **	0	0																																																																																																																																																																																																																																																																																															
Independent Claims	3	-3 **	0	0																																																																																																																																																																																																																																																																																															
Multiple Dependent			0	0																																																																																																																																																																																																																																																																																															
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																																																																																																																														
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																																																																																																																
1202	18	2202	9	Claims in excess of 20																																																																																																																																																																																																																																																																																															
1201	84	2201	42	Independent claims in excess of 3																																																																																																																																																																																																																																																																																															
1203	280	2203	140	Multiple dependent claim, if not paid																																																																																																																																																																																																																																																																																															
1204	84	2204	42	** Reissue independent claims over original patent																																																																																																																																																																																																																																																																																															
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent																																																																																																																																																																																																																																																																																															
SUBTOTAL (2)					(\$ 0)																																																																																																																																																																																																																																																																																														
Large Entity		Small Entity		Fee Description	Fee Paid																																																																																																																																																																																																																																																																																														
Fee Code	Fee (\$)	Fee Code	Fee (\$)																																																																																																																																																																																																																																																																																																
1051	130	2051	65	Surcharge - late filing fee or oath																																																																																																																																																																																																																																																																																															
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.																																																																																																																																																																																																																																																																																															
1053	130	1053	130	Non-English specification																																																																																																																																																																																																																																																																																															
1812	2,520	1812	2,520	For filing a request for reexamination																																																																																																																																																																																																																																																																																															
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																																																																																																																																															
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																																																																																																																																															
1251	110	2251	55	Extension for reply within first month																																																																																																																																																																																																																																																																																															
1252	410	2252	205	Extension for reply within second month																																																																																																																																																																																																																																																																																															
1253	930	2253	465	Extension for reply within third month																																																																																																																																																																																																																																																																																															
1254	1,450	2254	725	Extension for reply within fourth month																																																																																																																																																																																																																																																																																															
1255	1,970	2255	985	Extension for reply within fifth month																																																																																																																																																																																																																																																																																															
1401	320	2401	160	Notice of Appeal																																																																																																																																																																																																																																																																																															
1402	320	2402	160	Filing a brief in support of an appeal																																																																																																																																																																																																																																																																																															
1403	280	2403	140	Request for oral hearing																																																																																																																																																																																																																																																																																															
1451	1,510	1451	1,510	Petition to institute a public use proceeding																																																																																																																																																																																																																																																																																															
1452	110	2452	55	Petition to revive - unavoidable																																																																																																																																																																																																																																																																																															
1453	1,300	2453	650	Petition to revive - unintentional																																																																																																																																																																																																																																																																																															
1501	1,300	2501	650	Utility issue fee (or reissue)																																																																																																																																																																																																																																																																																															
1502	470	2502	235	Design issue fee																																																																																																																																																																																																																																																																																															
1503	630	2503	315	Plant issue fee																																																																																																																																																																																																																																																																																															
1460	130	1460	130	Petitions to the Commissioner																																																																																																																																																																																																																																																																																															
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)																																																																																																																																																																																																																																																																																															
1806	180	1806	180	Submission of Information Disclosure Stmt																																																																																																																																																																																																																																																																																															
8021	40	8021	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																																																																																																																																															
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																																																																																																																																																																																															
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))																																																																																																																																																																																																																																																																																															
1801	750	2801	375	Request for Continued Examination (RCE)																																																																																																																																																																																																																																																																																															
1802	900	1802	900	Request for expedited examination of a design application																																																																																																																																																																																																																																																																																															

**or number previously paid, if greater; For Reissues, see above

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	John P. Musone	Registration No. Attorney/Agent)	44,961	Telephone	407-736-6449
Signature		Date	August 27, 2003		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.
 This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.